Typical L-Frame Circuit Breaker

Contents

L-Frame (125–600 Amperes)

Product Description

- All Eaton L-Frame circuit breakers are HACR rated
- L-Frame circuit breakers are available as individual components (frame, trip unit, terminals), or factory assembled complete breakers
- L-Frame circuit breakers with non-interchangeable trip units are suitable for reverse feed use

Standards and Certifications

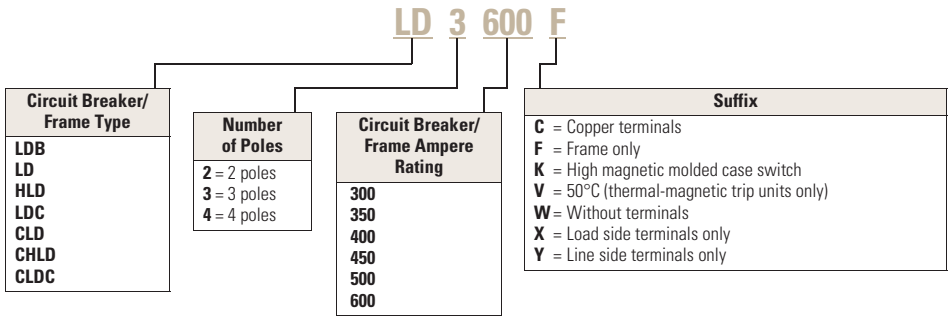
- CE marked

CE

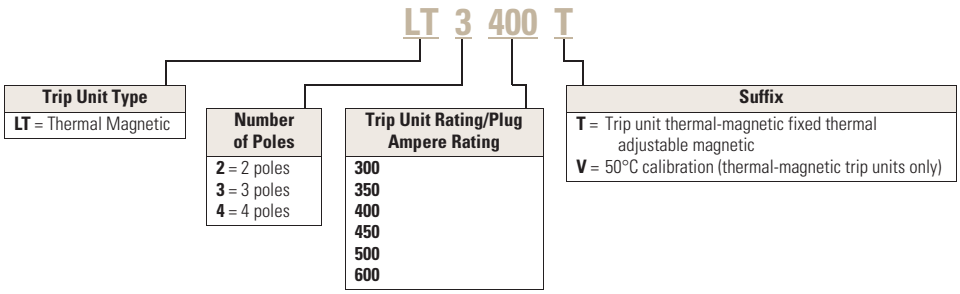
Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

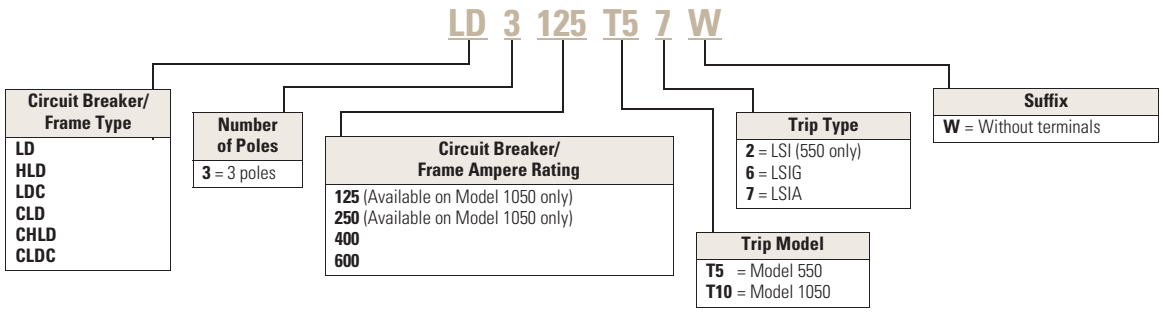
Circuit Breaker/Frame



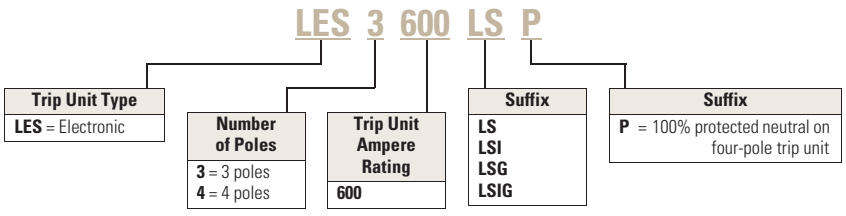
Thermal-Magnetic Trip Unit



OPTIM Circuit Breaker/Frame



Digitrip RMS 310 Trip Unit



Product Selection

Types LD, HLD and LDC Thermal-Magnetic Circuit Breakers with Interchangeable Trip Units

Maximum Continuous Ampere Rating at 40°C ①	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac Factory Assembled Circuit Consisting of Frame, Trip Unit and Terminals Catalog Number	Thermal-Magnetic Trip Unit Only For Use with Standard or High or Ultra High Interrupting Frames Catalog Number	Standard Terminals Only See Page V4-T2-214 for Optional Terminals Catalog Number
Two-Pole					
300	**LD2300**	**HLD2300**	**LDC2300**	**LT2300T**	**TA602LD** ②
350	**LD2350**	**HLD2350**	**LDC2350**	**LT2350T**	**TA602LD** ②
400	**LD2400**	**HLD2400**	**LDC2400**	**LT2400T**	**TA602LD** ②
450	**LD2450**	**HLD2450**	**LDC2450**	**LT2450T**	**TA602LD** ②
500	**LD2500**	**HLD2500**	**LDC2500**	**LT2500T**	**TA602LD** ②
600	**LD2600**	**HLD2600**	**LDC2600**	**LT2600T**	**2TA603LDK** ③
Three-Pole					
300	**LD3300**	**HLD3300**	**LDC3300**	**LT3300T**	**TA602LD** ②
350	**LD3350**	**HLD3350**	**LDC3350**	**LT3350T**	**TA602LD** ②
400	**LD3400**	**HLD3400**	**LDC3400**	**LT3400T**	**TA602LD** ②
450	**LD3450**	**HLD3450**	**LDC3450**	**LT3450T**	**TA602LD** ②
500	**LD3500**	**HLD3500**	**LDC3500**	**LT3500T**	**TA602LD** ②
600	**LD3600**	**HLD3600**	**LDC3600**	**LT3600T**	**3TA603LDK** ③
Four-Pole ④					
300	**LD4300**	**HLD4300**	**LDC4300**	**LT4300T**	**TA602LD** ②
350	**LD4350**	**HLD4350**	**LDC4350**	**LT4350T**	**TA602LD** ②
400	**LD4400**	**HLD4400**	**LDC4400**	**LT4400T**	**TA602LD** ②
450	**LD4450**	**HLD4450**	**LDC4450**	**LT4450T**	**TA602LD** ②
500	**LD4500**	**HLD4500**	**LDC4500**	**LT4500T**	**TA602LD** ②
600	**LD4600**	**HLD4600**	**LDC4600**	**LT4600T**	**4TA603LDK** ③

Types LD, HLD and LDC Thermal-Magnetic Circuit Breakers—Frame Only

Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac Catalog Number	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac Catalog Number	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac Catalog Number
Two-Pole		
LD2600F	**HLD2600F**	**LDC2600F**
Three-Pole		
LD3600F	**HLD3600F**	**LDC3600F**
Four-Pole		
LD4600F	**HLD4600F**	**LDC4600F**

Notes

① Magnetic trip range 5–10 times continuous ampere rating.
② Individually packed.
③ Terminal kits contain one terminal for each pole and one terminal cover.
④ Neutral is in right pole.

Types LD, HLD and LDC Electronic Circuit Breakers with Interchangeable Trip Units

Order as individual components: breaker frame, trip unit, rating plug, terminals.

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Types LD, HLD and LDC Electronic Circuit Breakers with Interchangeable Trip Units

	Circuit Breaker Frame Only			Digitrip RMS 310 Trip Unit Only ②				Digitrip RMS 310 Rating Plug Only			
				L – Adjustable Long Delay Pickup (By Adjustable Rating Plug) S – Adjustable Short Delay Pickup with Fixed Short Delay Time (I^2t Response) or Adjustable Short Delay Time (Flat Response) I – Adjustable Instantaneous Pickup by Setting Short Delay Time to Instantaneous G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Delay (Flat Response)						Adjustable Rating Plug	Standard Terminals Only
Maximum Continuous Ampere Rating at 40°C ①	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac					Ampere Rating	Fixed Rating Plug	Ampere Rating	See Page V4-T2-214 for Optional Terminals
	Catalog Number			Catalog Number				Catalog Number			
Three-Pole ③											
600	**LD3600F**	**HLD3600F**	**LDC3600F**	**LES3600LS**	**LES3600LSI**	**LES3600LSG**	**LES3600LSIG**	300	**6LES300T**	300/400/500/600 **A6LES600T1**	**TA602LD** ①
								350	**6LES350T**		**TA602LD** ①
								400	**6LES400T**	420/440/460/480 **A6LES400T5**	**TA602LD** ①
								450	**6LES450T**		**TA602LD** ①
								500	**6LES500T**	520/540/560/580 **A6LES500T5**	**3TA603LDK** ④
								600	**6LES600T**		
Four-Pole ③											
600	**LD4600F**	**HLD4600F**	**LDC4600F**	**LES4600LS**	**LES4600LSI**	—	—	300	**6LES300T**	300/400/500/600 **A6LES600T1**	**TA602LD** ②
								350	**6LES350T**		**TA602LD** ②
								400	**6LES400T**	420/440/460/480 **A6LES400T5**	**TA602LD** ②
								450	**6LES450T**		**TA602LD** ②
								500	**6LES500T**	520/540/560/580 **A6LES500T5**	**4TA603LDK** ④
								600	**6LES600T**		

Notes

① Individually packed.
② For AC use only.
③ Neutral is in right pole.
④ Terminal kits contain one terminal for each pole and one terminal cover.

Types LDB, HLDB and LDCB Electronic Circuit Breakers with Non-Interchangeable Electronic Trip Units Suitable for Reverse Feed

Maximum Continuous Ampere Rating at 40°C	Number of Poles	Circuit Breaker Frame Including Digitrip RMS 310 Electronic Tip Unit Less Terminals and Rating Plug—Catalog Number L – Adjustable Long Delay Pickup (By Adjustable Rating Plug) S – Adjustable Short Delay Pickup with Fixed Short Delay Time (I^2t Response) or Adjustable Short Time (Flat Response) I – Adjustable Instantaneous Pickup by Setting Short Time Delay Time to Instantaneous G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Delay (Flat Response)				Digitrip RMS 310 Rating Plug (Order as Separate Items)	
		LS	LSI	LSG	LSIG	Fixed	Adjustable
Short Time Range		2–8 x I_n	2–8 x I_n	2–8 x I_n	2–8 x I_n		
Short Time Delay		—	I–300 ms	—	0–300 ms		
Ground Fault Pickup	Number	—	—	Varies by frame	Varies by frame		
Ground Fault Delay	of Poles	—	—	0–500 ms	0–500 ms	Catalog Number	
Type LDB, HLDB and LDCB with Digitrip 310 Non-Interchangeable Trip Unit							
600	3	**LDB3600FT33W**	**LDB3600FT32W**	**LDB3600FT35W**	**LDB3600FT35W**	**6LES300T**	300/400/500/600 **A6LES600T1**
						6LES350T	
						6LES400T	420/440/460/480 **A6LES400T5**
						6LES450T	
						6LES500T	520/540/560/580 **A6LES500T5**
						6LES600T	
600	3	**HLDB3600FT33W**	**HLDB3600FT32W**	**HLDB3600FT35W**	**HLDB3600FT36W**	**6LES300T**	300/400/500/600 **A6LES600T1**
						6LES350T	
						6LES400T	420/440/460/480 **A6LES400T5**
						6LES450T	
						6LES500T	520/540/560/580 **A6LES500T5**
						6LES600T	
600	3	**LDCB3600FT33W**	**LDCB3600FT32W**	**LDCB3600FT35W**	**LDCB3600FT36W**	**6LES300T**	300/400/500/600 **A6LES600T1**
						6LES350T	
						6LES400T	420/440/460/480 **A6LES400T5**
						6LES450T	
						6LES500T	520/540/560/580 **A6LES500T5**
						6LES600T	

100% Rated Types CLD, CHLD and CLDC Electronic Circuit Breakers with Interchangeable Trip Units

The NEC allows the breaker to be rated at 100% of its frame size in an assembly, provided that 90°C wire is applied at the 75°C ampacity. All 100% rated circuit breakers have electronic trip units. Order as individual components: breaker frame, trip unit, rating plug and terminals.

100% Rated Types CLD, CHLD and CLDC Electronic Circuit Breakers with Interchangeable Trip Units

	Circuit Breaker Frame Only			Digitrip RMS 310 Trip Unit Only				Digitrip RMS 310 Rating Plug Only			
				Standard	Options					Adjustable Rating Plug	
Maximum Continuous Ampere Rating at 40°C ①	Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac	High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac	Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac	Adjustable Short Time Pickup with I^2t Short Delay Ramp	Independently Adjustable Short Time Pickup and Delay Ground Fault Protection	Adjustable Short Time Pickup with I^2t Short Delay and Ground Fault Protection	Independently Adjustable Short Time Pickup and Delay and Ground Fault Protection	Ampere Rating	Fixed Rating Plug Catalog Number	Ampere Rating	Standard Terminals Only See Page V4-T2-214 for Optional Terminals
	Catalog Number										
Three-Pole											
600	**CLD3600F**	**CHLD3600F**	**CLDC3600F**	**LES3600LS**	**LES3600LSI**	**LES3600LSG**	**LES3600LSIG**	300	**6LES300T**	300/400/500/600 **A6LES600T1**	**TA602LD** ②
								350	**6LES350T**		**TA602LD** ②
								400	**6LES400T**	420/440/460/480 **A6LES400T5**	**TA602LD** ②
								450	**6LES450T**		**TA602LD** ②
								500	**6LES500T**	520/540/560/580 **A6LES500T5**	**3TA603LDK** ③
								600	**6LES600T**		**3TA603LDK** ③

Notes

① Ampere rating is established by rating plug.

② Individually packed.

③ 3TA603LDK terminal kit contains one terminal for each pole and one terminal cover.

Type LDB Thermal-Magnetic Circuit Breakers with Non-Interchangeable Trip Units ①

Maximum Continuous Ampere Rating	600 Vac Rated, 250 Vdc Complete Circuit Breaker Without Line and Load Terminals Catalog Number	With Standard Line and Load Terminals Only Catalog Number
Two-Pole		
300	**LDB2300W**	**LDB2300**
350	**LDB2350W**	**LDB2350**
400	**LDB2400W**	**LDB2400**
450	**LDB2450W**	**LDB2450**
500	**LDB2500W**	**LDB2500**
600	**LDB2600W**	**LDB2600**
Three-Pole		
300	**LDB3300W**	**LDB3300**
350	**LDB3350W**	**LDB3350**
400	**LDB3400W**	**LDB3400**
450	**LDB3450W**	**LDB3450**
500	**LDB3500W**	**LDB3500**
600	**LDB3600W**	**LDB3600**

Molded Case Switches

Eaton's molded case switches are used as compact switches in applications requiring high current switching capabilities. Molded case switches are constructed of circuit breaker components and are of the high instantaneous automatic type. Molded case switches are listed in accordance with Underwriters Laboratories Standard UL 489.

Molded Case Switches

Maximum Continuous Ampere Rating at 40°C	600 Vac Maximum, 250 Vdc Circuit Breaker Only without Line and Load Terminals Catalog Number	Standard Terminals Only See Page V4-T2-214 for Optional Terminals Catalog Number
Two-Pole		
600	**LD2600WK**	**2TA603LDK**
600	**LDB2600WK** ①	**2TA603LDK**
600	**HLD2600WK**	**2TA603LDK**
Three-Pole		
600	**LD3600WK**	**3TA603LDK**
600	**LDB3600WK** ①	**3TA603LDK**
600	**HLD3600WK**	**3TA603LDK**
Four-Pole		
600	**LD4600WK**	**4TA603LDK**
600	**LDB4600WK** ①	**4TA603LDK**
600	**HLD4600WK**	**4TA603LDK**

Notes

① Factory sealed—suitable for reverse feed application.

Molded case switch will trip above 6000 amperes.

Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

Digitrip OPTIM 550 Electronic Circuit Breaker with Interchangeable Rating Plug

	Circuit Breaker Frame Only L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			Digitrip OPTIM Rating Plug Only	
Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ② LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac					
125	**LD3125T52W**	**LD3125T56W**	**LD3125T57W**	—	**ORPL125A070**
				—	**ORPL125A090**
				—	**ORPL125A100**
				—	**ORPL125A110**
				—	**ORPL125A125**
250	**LD3250T52W**	**LD3250T56W**	**LD3250T57W**	—	**ORPL025A125**
				—	**ORPL025A150**
				—	**ORPL025A175**
				—	**ORPL025A200**
				—	**ORPL025A225**
				—	**ORPL025A250**
400	**LD3400T52W**	**LD3400T56W**	**LD3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				300	**ORPL40A300**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**LD3600T52W**	**LD3600T56W**	**LD3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

Digitrip OPTIM 550 Electronic Circuit Breaker with Interchangeable Rating Plug, continued

	Circuit Breaker Frame Only L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			Digitrip OPTIM Rating Plug Only	
Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ②				
	LSI	LSIG	LSIA		Fixed Rating Plug
	Catalog Number	Catalog Number	Catalog Number	Ampere Rating	Catalog Number
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
125	**HLD3125T52W**	**HLD3125T56W**	**HLD3125T57W**	70	**ORPL125A070**
				90	**ORPL125A090**
				100	**ORPL125A100**
				110	**ORPL125A110**
				125	**ORPL125A125**
250	**HLD3250T52W**	**HLD3250T56W**	**HLD3250T57W**	125	**ORPL025A125**
				150	**ORPL025A150**
				175	**ORPL025A175**
				200	**ORPL025A200**
				225	**ORPL025A225**
				250	**ORPL025A250**
400	**HLD3400T52W**	**HLD3400T56W**	**HLD3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				300	**ORPL40A300**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**HLD3600T52W**	**HLD3600T56W**	**HLD3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

Digitrip OPTIM 550 Electronic Circuit Breaker with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ③
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ③ LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac					
125	**LDC3125T52W**	**LDC3125T56W**	**LDC3125T57W**	—	**ORPL125A070**
				—	**ORPL125A090**
				—	**ORPL125A100**
				—	**ORPL125A110**
				—	**ORPL125A125**
250	**LDC3250T52W**	**LDC3250T56W**	**LDC3250T57W**	—	**ORPL025A125**
				—	**ORPL025A150**
				—	**ORPL025A175**
				—	**ORPL025A200**
				—	**ORPL025A225**
				—	**ORPL025A250**
400	**LDC3400T52W**	**LDC3400T56W**	**LDC3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				300	**ORPL40A300**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**LDC3600T52W**	**LDC3600T56W**	**LDC3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

③ Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

Digitrip OPTIM Electronic Circuit Breaker with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug

	Circuit Breaker Frame Only L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)		Digitrip OPTIM Rating Plug Only	
Maximum Continuous Ampere Rating at 40°C	OPTIM 1050 ②③ LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac				
125	**LD3125T106W**	**LD3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**LD3250T106W**	**LD3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**LD3400T106W**	**LD3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**LD3600T106W**	**LD3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.

③ Factory sealed.

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, continued

	Circuit Breaker Frame Only		Digitrip OPTIM Rating Plug Only	
	L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			
Maximum Continuous Ampere Rating at 40°C	OPTIM 1050 ②③ LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
125	**HLD3125T106W**	**HLD3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**HLD3250T106W**	**HLD3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**HLD3400T106W**	**HLD3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**HLD3600T106W**	**HLD3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.

③ Factory sealed.

Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 1050 ②③ LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac				
125	**LDC3125T106W**	**LDC3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**LDC3250T106W**	**LDC3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**LDC3400T106W**	**LDC3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**LDC3600T106W**	**LDC3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.
② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
③ Factory sealed.

100% Rated Digitrip OPTIM Circuit Breakers with Interchangeable Rating Plug

Order as individual components: Breaker Frame (which includes Trip Unit), Rating Plug, Terminals.

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100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plug

	Circuit Breaker Frame Only L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ① S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response) I – Adjustable Instantaneous Pickup G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response) A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)			Digitrip OPTIM Rating Plug Only	
Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ②				
	LSI	LSIG	LSIA		Fixed Rating Plug
	Catalog Number	Catalog Number	Catalog Number	Ampere Rating	Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac					
125	**CLD3125T52W**	**CLD3125T56W**	**CLD3125T57W**	70	**ORPL125A070**
				90	**ORPL125A090**
				100	**ORPL125A100**
				110	**ORPL125A110**
				125	**ORPL125A125**
250	**CLD3250T52W**	**CLD3250T56W**	**CLD3125T57W**	125	**ORPL025A125**
				150	**ORPL025A150**
				175	**ORPL025A175**
				200	**ORPL025A200**
				225	**ORPL025A225**
				250	**ORPL025A250**
400	**CLD3400T52W**	**CLD3400T56W**	**CLD3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				300	**ORPL40A300**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**CLD3600T52W**	**CLD3600T56W**	**CLD3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ② LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Fixed Rating Plug Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac					
125	**CHLD3125T52W**	**CHLD3125T56W**	**CHLD3125T57W**	70	**ORPL125A070**
				90	**ORPL125A090**
				100	**ORPL125A100**
				110	**ORPL125A125**
				125	**ORPL125A125**
250	**CHLD3250T52W**	**CHLD3250T56W**	**CHLD3125T57W**	125	**ORPL025A125**
				150	**ORPL025A150**
				175	**ORPL025A175**
				200	**ORPL025A200**
				225	**ORPL025A225**
				250	**ORPL025A250**
400	**CHLD3400T52W**	**CHLD3400T56W**	**CHLD3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**CHLD3600T52W**	**CHLD3600T56W**	**CHLD3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

100% Rated Digitrip OPTIM 550 Circuit Breakers with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 550 ② LSI Catalog Number	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac					
125	**CLDC3125T52W**	**CLDC3125T56W**	**CLDC3125T57W**	70	**ORPL125A070**
				90	**ORPL125A090**
				100	**ORPL125A100**
				110	**ORPL125A110**
				125	**ORPL125A125**
250	**CLDC3250T52W**	**CLDC3250T56W**	**CLDC3125T57W**	125	**ORPL025A125**
				150	**ORPL025A150**
				175	**ORPL025A175**
				200	**ORPL025A200**
				225	**ORPL025A225**
				250	**ORPL025A250**
400	**CLDC3400T52W**	**CLDC3400T56W**	**CLDC3400T57W**	200	**ORPL40A200**
				225	**ORPL40A225**
				250	**ORPL40A250**
				300	**ORPL40A300**
				350	**ORPL40A350**
				400	**ORPL40A400**
600	**CLDC3600T52W**	**CLDC3600T56W**	**CLDC3600T57W**	300	**ORPL60A300**
				350	**ORPL60A350**
				400	**ORPL60A400**
				500	**ORPL60A500**
				600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.

② Zone interlocking, PowerNet, or both features can be added at the factory by adding suffixes **ZG**, **PN** or **ZGP** respectively to above catalog number.

100% Rated Digitrip OPTIM 1050 Circuit Breakers with Interchangeable Rating Plug

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

OPTIM 1050 ②③

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	LSIG Catalog Number	LSIA Catalog Number	Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Standard Interrupting Capacity 600 Vac Rated 35 kAIC at 480 Vac				
125	**CLD3125T106W**	**CLD3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**CLD3250T106W**	**CLD3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**CLD3400T106W**	**CLD3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**CLD3600T106W**	**CLD3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.
② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
③ Factory sealed.

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100% Rated Digitrip OPTIM 1050 Circuit Breakers with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 1050 ②③ LSIG Catalog Number	LSIA Catalog Number	Fixed Rating Plug Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole High Interrupting Capacity 600 Vac Rated 65 kAIC at 480 Vac				
125	**CHLD3125T106W**	**CHLD3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**CHLD3250T106W**	**CHLD3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**CHLD3400T106W**	**CHLD3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**CHLD3600T106W**	**CHLD3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.
② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
③ Factory sealed.

100% Rated Digitrip OPTIM 1050 Electronic Circuit Breaker with Interchangeable Rating Plug, continued

Circuit Breaker Frame Only

L – Adjustable Long Delay Pickup (I_r) with Adjustable Long Delay Time (I^2t or I^4t Response) ①
S – Adjustable Short Delay Pickup with Adjustable Short Delay Time (I^2t or Flat Response)
I – Adjustable Instantaneous Pickup
G – Adjustable Ground Fault Pickup with Adjustable Ground Fault Time (I^2t or Flat Response)
A – Adjustable Ground Fault Alarm with Adjustable Ground Fault Time (I^2t or Flat Response)

Digitrip OPTIM Rating Plug Only

Maximum Continuous Ampere Rating at 40°C	OPTIM 1050 ②③ LSIG Catalog Number	LSIA Catalog Number	Fixed Rating Plug Ampere Rating	Fixed Rating Plug Catalog Number
Three-Pole Ultra High Interrupting Capacity Current Limiting 600 Vac Rated 100 kAIC at 480 Vac				
125	**CLDC3125T106W**	**CLDC3125T107W**	70	**ORPL125A070**
			90	**ORPL125A090**
			100	**ORPL125A100**
			110	**ORPL125A110**
			125	**ORPL125A125**
250	**CLDC3250T106W**	**CLDC3250T107W**	125	**ORPL025A125**
			150	**ORPL025A150**
			175	**ORPL025A175**
			200	**ORPL025A200**
			225	**ORPL025A225**
			250	**ORPL025A250**
400	**CLDC3400T106W**	**CLDC3400T107W**	200	**ORPL40A200**
			225	**ORPL40A225**
			250	**ORPL40A250**
			300	**ORPL40A300**
			350	**ORPL40A350**
			400	**ORPL40A400**
600	**CLDC3600T106W**	**CLDC3600T107W**	300	**ORPL60A300**
			350	**ORPL60A350**
			400	**ORPL60A400**
			500	**ORPL60A500**
			600	**ORPL60A600**

Notes

① Long delay I^4t response selection limits short delay time to flat response.
② One Form C auxiliary switch and one Form C bell alarm switch supplied with breaker as standard.
③ Factory sealed.

Accessories Selection Guide and Ordering Information

Line and Load Terminals

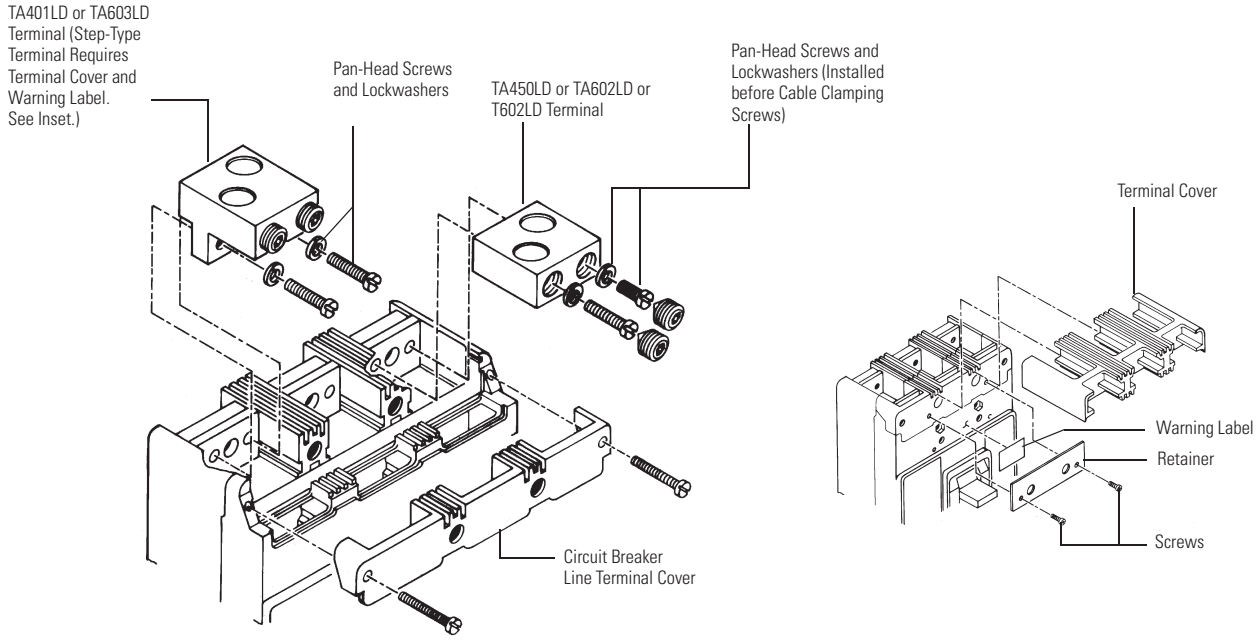
Eaton's line and load terminals provide wire connecting capabilities for specific ranges of continuous current ratings and wire types. All terminals comply with Underwriters Laboratories Standards UL 486A and UL 486B and CSA Standard C22.2 No. 65M. Unless otherwise specified, L-Frame circuit breaker line and load terminals are shipped separately for field installation.

The wire connecting terminal is secured with two pan-head, slotted screws and lockwashers that can be checked for the correct torque loading or retightened from the front of the circuit breaker before installation of the conductors. (Applies to all styles.) The circuit breaker line/load terminal conductors are positioned in the conducting holes in the wire connecting terminal and are secured with recessed socket screws that are tightened to the correct torque loading from the front of the circuit breaker.

Ordering Information

L-Frame circuit breakers use Cu/Al terminals as standard. When optional copper terminals are required, order by catalog Number. Specify if factory installation is required.

Terminals



Line and Load Terminals

Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/Number of Conductors	Metric Wire Range mm²	Terminal Poles	Catalog Number	Terminals with Control Wire Termination Catalog Number
Standard Cu/Al Pressure Terminals							
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Two-pole kit ①	**2TA401LDK**	—
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Three-pole kit ①	**3TA401LDK**	—
400	Aluminum	Cu/Al	4/0–600 (1)	120–300	Four-pole kit ①	**4TA401LDK**	—
450	Aluminum	Cu/Al	4–4/0 (2)	25–95	②	**TA450LD**	—
500	Aluminum	Cu/Al	3/0–350 (2)	95–150	②	**TA602LD**	**TA602LDCW**
600	Aluminum	Cu/Al	400–500 (2)	185–240	Two-pole kit ①	**2TA603LDK**	**2TA603LDKCW**
600	Aluminum	Cu/Al	400–500 (2)	185–240	Three-pole kit ①	**3TA603LDK**	**3TA603LDKCW**
600	Aluminum	Cu/Al	400–500 (2)	185–240	Four-pole kit ①	**4TA603LDK**	**4TA603LDKCW**
Optional Copper and Cu/Al Pressure Type Terminals							
600	Copper	Cu	250–350 (2)	120–250	②	**T602LD**	**T602LDCW**

Notes

① Terminal kits contain one terminal for each pole and one terminal cover.

② Individually packed.

Accessories

Allowable Accessory Combinations

Different combinations of accessories can be supplied, depending on the types of accessories and the number of poles in the circuit breaker.

LD Frame Accessories

Description	Reference Page	Two-Pole ①, Three-Pole Left	Center	Right	Four-Pole Left	Center	Right	Neutral ②
Internal Accessories (Only One Internal Accessory Per Pole) ③								
Alarm lockout (Make/Break)	**V4-T2-305**	■		■	■		■	
Alarm lockout (2Make/2Break)	**V4-T2-305**	■		■	■		■	
Auxiliary switch (1A, 1B)	**V4-T2-307**	■		■	■		■	
Auxiliary switch (2A, 2B)	**V4-T2-307**	■		■	■		■	
Auxiliary switch (3A, 3B)	**V4-T2-307**	■		■	■		■	
Auxiliary switch (1A, 1B) and alarm switch combination	**V4-T2-309**	■		■	■		■	
Auxiliary switch (2A, 2B) and alarm switch combination	**V4-T2-309**	■		■	■		■	
Shunt trip—standard ④	**V4-T2-311**	■		■	■		■	
Shunt trip—low energy ④	**V4-T2-314**	■		■	■		■	
Undervoltage release mechanism ④	**V4-T2-320**	■		■	■		■	
Eaton PowerNet communications kit (OPTIM 550)	**V4-T2-322**			■				
External Accessories								
End cap kit	**V4-T2-337**	●	●	●	●	●	●	●
Control wire terminal kit	**V4-T2-338**	●	●	●	●	●	●	●
Base mounting hardware	**V4-T2-340**	●	●	●	●	●	●	●
Terminal shields	**V4-T2-342**	●	●	●	●	●	●	●
Interphase barriers	**V4-T2-342**	●	●	●	●	●	●	●
Non-padlockable handle block	**V4-T2-343**		■			■		
Padlockable handle lock hasp	**V4-T2-344**	❑		❑	❑		❑	
Key interlock kit	**V4-T2-345**	❑		❑	❑		❑	
Sliding bar interlock—requires two breakers	**V4-T2-346**	●	●	●				
Walking beam interlock—requires two breakers	**V4-T2-346**	●	●	●	●	●	●	●
Electrical (motor) operator	**V4-T2-347**	●	●	●	●	●	●	●
Plug-in adapters	**V4-T2-349**	●	●	●	●	●	●	●
Rear connecting studs	**V4-T2-350**	●	●	●	●	●	●	●
Panelboard connecting straps	**V4-T2-351**	●	●	●	●	●	●	●
Handle mechanisms	**V4-T2-353**	●	●	●	●	●	●	●
Handle extension	**V4-T2-357**	●	●	●	●	●	●	●
Solid-state (electronic) portable test kit	**V4-T2-358**	●	●	●	●	●	●	●

Legend

■ Applicable in indicated pole position
❑ May be mounted on left or right pole—not both
● Accessory available/modification available

Notes

① Two-pole breaker supplied in three-pole frame. Current carrying parts omitted from center pole.
② Refer to Eaton for appropriate neutral pole accessory combinations.
③ OPTIM model 1050 is factory sealed and does not have the right pole space available for accessories.
④ Shunt trip and UVR cannot be mounted in right poles on LES or OPTIM trip units. Standard non-tripping internal accessories can be mounted in the left or right poles of LES and 550 OPTIM trip units.

LD Frame Accessories, continued

Description	Reference Page	Two-Pole ①, Three-Pole Left	Center	Right	Four-Pole Left	Center	Right	Neutral ②
OPTIM System Components Three Poles								
Ground fault alarm unit	**V4-T2-358**							
Potential transformer module	**V4-T2-358**							
Breaker interface module (BIM)	**V4-T2-359**							
Digitrip OPTIMizer	**V4-T2-359**							
Auxiliary power module	**V4-T2-359**							
Modifications (Refer to Eaton)								
Special calibration	—	●	●	●	●	●	●	●
Moisture fungus treatment	**V4-T2-123**	●	●	●	●	●	●	●
Freeze-tested circuit breakers	—	●	●	●	●	●	●	●
Marine/naval application	—	●	●	●	●	●	●	●

Legend

■ Applicable in indicated pole position

❑ May be mounted on left or right pole—not both

● Accessory available/modification available

Notes

① Two-pole breaker supplied in three-pole frame. Current carrying parts omitted from center pole.

② Refer to Eaton for appropriate neutral pole accessory combinations.

Technical Data and Specifications

UL 489 Interrupting Capacity Ratings ①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA rms Symmetrical Amperes) Volts AC (50/60 Hz) 240	277	480	600	Volts DC 125	250 ②③
LDB	2, 3	65	—	35	25	—	22
LD	2, 3, 4	65	—	35	25	—	22
CLD ④	2, 3, 4	65	—	35	25	—	—
HLD, HLDB	2, 3, 4	100	—	65	35	—	25
CHLD ④	2, 3, 4	100	—	65	35	—	—
LDC, LDCB ⑤	2, 3, 4	200	—	100	50	—	30
CLDC ④⑤	2, 3, 4	200	—	100	50	—	—

IEC 947-2 Interrupting Capacity Ratings ①

Circuit Breaker Type	Number of Poles	Interrupting Capacity (kA Symmetrical Amperes) Volts AC (50/60 Hz) 240		415		690		Volts DC 250 ②③	
		I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}
LDB	2, 3	85	85	45	45	20	10	20	10
LD	2, 3, 4	85	85	45	45	20	10	20	10
CLD ④	2, 3, 4	85	85	45	45	20	10	—	—
HLD, HLDB	2, 3, 4	100	100	70	70	25	13	20	10
CHLD ④	2, 3, 4	100	100	70	70	25	13	—	—
LDC, LDCB	2, 3, 4	200	100	100	75	35	18	20	10
CLDC ④	2, 3, 4	200	100	100	75	35	18	—	—

Notes

① Utilization Category A circuit breakers.
② L/R = 8 milliseconds minimum.
③ Two-pole circuit breaker or two poles of three-pole circuit breaker. Incorporating thermal-magnetic trip unit only.
④ 100% rated breakers.
⑤ Current limiting.

Specifications

Trip Unit Type	Digitrip RMS 310		Digitrip OPTIM 550	Digitrip OPTIM 1050
rms sensing	Yes	Yes	Yes	Yes
Breaker Type				
Frame	L	L	L	L
Ampere range	300–600A	300–600A	200–600A	200–600A
Interrupting rating at 480 volts	35, 65, 100 (kA)	35, 65, 100 (kA)	35, 65, 100 (kA)	35, 65, 100 (kA)
Protection				
Ordering options	LS, LSG	LSI, LSIG	LSI, LSI(A), LSIG	LSI(A), LSIG
Fixed rated plug (I_n)	Yes	Yes	Yes	Yes
Overtemperature trip	Yes	Yes	Yes	Yes
Long Delay Protection (L)				
Adjustable rating plug (I_n)	Yes	Yes	No	No
Long delay pickup	0.5–1.0 (I_n) ①	0.5–1.0 (I_n) ①	0.4–1.0 x (I_n)	0.4–1.0 x (I_n)
Long delay time I^2t	12 seconds	12 seconds	2–24 seconds	2–24 seconds
Long delay time I^4t	No	No	1–5 seconds	1–5 seconds
Long delay thermal memory	Yes	Yes	Yes	Yes
High load alarm	No	No	0.5–1.0 x I_r	0.5–1.0 x I_r
Short Delay Protection (S)				
Short delay pickup	200–800% x (I_n)	200–800% x (I_n)	150–800% x (I_r)	150–800% x (I_r)
Short delay time I^2t	100 ms	No	100–500 ms	100–500 ms
Short delay time flat	No	Inst–300 ms	100–500 ms	100–500 ms
Short delay time zone selective interlocking	No	No	Yes ④	Yes
Instantaneous Protection (I)				
Instantaneous pickup	No	200–800% x (I_n)	200–800% x (I_n)	200–800% x (I_n)
Discriminator	No	No	Yes	Yes
Instantaneous override	Yes	Yes	Yes	Yes
Ground Fault Protection (G)				
Ground fault alarm	No	No	20–100% x (I_s)	20–100% x (I_s)
Ground fault pickup	1–5 x I_g (120A)	1–5 x I_g (120A)	20–100% x (I_s)	20–100% x (I_s)
Ground fault delay I^2t	No	No	100–500 ms	100–500 ms
Ground fault delay flat	Inst–500 ms	Inst–500 ms	100–500 ms	100–500 ms
Ground fault zone selective interlocking	No	No	Yes ④	Yes
Ground fault thermal memory	Yes	Yes	Yes	Yes
System Diagnostics				
Status LEDs	Yes	Yes	Yes	Yes
Cause of trip LEDs	No	No	Yes	Yes
Magnitude of trip information	No	No	Yes	Yes
Remote signal contact—ground alarm	Yes ⑤	Yes ⑤	Yes ④	Yes
Local auxiliary and bell alarm contact	Optional	Optional	Optional	Included

Legend

BIM = Breaker Interface Module
(A) = GF Alarm
I_s = Sensor Rating
I_n = Rating Plug
I_r = Long Delay Pickup Setting

Notes

① Adjust by rating plug.
② By OPTIMizer/BIM.
③ Eaton's PowerNet kit.
④ Zone interlock kit.
⑤ With separate ground fault alarm unit (GFAU).

Specifications, continued

Trip Unit Type	Digitrip RMS 310		Digitrip OPTIM 550	Digitrip OPTIM 1050
System Monitoring				
Digital display	No	No	Yes ①	Yes ①
Current	No	No	Yes	Yes
Power and energy	No	No	No	Yes
Power quality—harmonics	No	No	No	Yes
Power factor	No	No	No	Yes
Communications				
PowerNet	No	No	Yes ②	Yes
Testing				
Testing method	Test set	Test set	OPTIMizer, BIM, PowerNet	OPTIMizer, BIM, PowerNet

Legend

BIM = Breaker Interface Module
(A) = GF Alarm
I_s = Sensor Rating
I_n = Rating Plug
I_r = Long Delay Pickup Setting

Notes

① By OPTIMizer/BIM.
② Eaton's PowerNet kit.

Dimensions and Weights

Dimensions in Inches (mm)

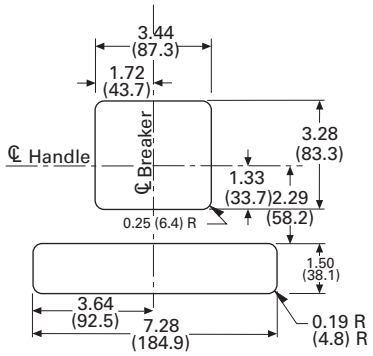
2

LD Frame

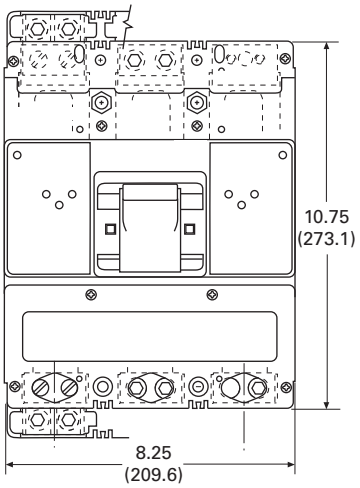
Number of Poles	Width	Height	Depth
2, 3	8.25 (209.6)	10.75 (273.1)	4.06 (103.1)
4	11.00 (279.4)	10.75 (273.1)	4.06 (103.1)

LD-Frame, Two- and Three-Pole

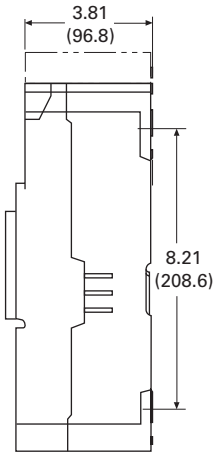
Front Cover Cutout



Front View



Side View



Approximate Shipping Weight, Lbs (kg)

LD Frame

Breaker Type	Complete Breaker			Frame Only			Trip Unit		
	Two-Pole	Three-Pole	Four-Pole	Two-Pole	Three-Pole	Four-Pole	Two-Pole	Three-Pole	Four-Pole
LD, HLD, LDC	18 (8.2)	20 (9.1)	25 (11.3)	14 (6.4)	15 (6.8)	20 (9.1)	3 (1.4)	4 (1.8)	5 (2.3)
LDB	18 (8.2)	20 (9.1)	25 (11.3)	—	—	—	—	—	—